

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 June 2004 (03.06.2004)

PCT

(10) International Publication Number
WO 2004/045754 A1

(51) International Patent Classification⁷: **B01F 15/00**,
11/00

(21) International Application Number:
PCT/EP2003/012232

(22) International Filing Date:
3 November 2003 (03.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02079843.5 20 November 2002 (20.11.2002) EP

(71) Applicant (for AL, AM, AT, AZ, BA, BE, BF, BG, BJ, BR, BY, CF, CG, CH, CI, CM, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, FR, GA, GE, GN, GQ, GR, GW, HR, HU, ID, IS, IT, JP, KG, KP, KR, KZ, LR, LT, LU, LV, MA, MC, MD, MG, MK, ML, MR, MX, MZ, NE, NI, NL, NO, PH, PL, PT, RO, RU, SE, SI, SK, SN, SY, TD, TG, TJ, TM, TN, TR, UA, UZ, VN, YU only): **UNILEVER N.V.** [NL/NL]; UNILEVER N.V., Weena 455, NL-3013 AL Rotterdam (NL).

(71) Applicant (for AE, AG, AU, BB, BZ, CA, EG, GB, GD, GH, GM, IL, KE, LC, LK, LS, MN, MW, NZ, OM, PG, SC, SD,

SG, SL, TT, TZ, UG, VC, ZA, ZM, ZW, SZ, CY, IE only): **UNILEVER PLC** [GB/GB]; UNILEVER HOUSE, Blackfriars, London, Greater London EC4P 4BQ (GB).

(71) Applicant (for IN only): **HINDUSTAN LEVER LIMITED** [IN/IN]; Hindustan Lever House, 165/166 Backbay Reclamation, Maharashtra, 400 020 Mumbai (IN).

(72) Inventors; and

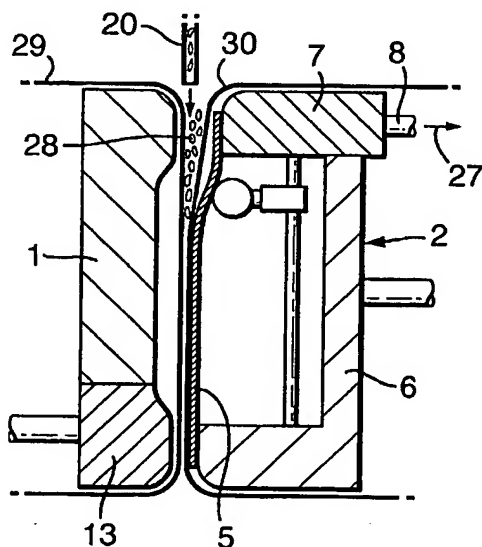
(75) Inventors/Applicants (for US only): **ESVELD**, Erik [NL/NL]; ATO BV, Bornsesteeg 59, NL-6700 AA Wageningen (NL). **HAMOEN**, Remco [NL/NL]; ATO BV, Bornsesteeg 59, NL-6700 AA Wageningen (NL). **HOOGLAND**, Hans [NL/NL]; Unilever R & D Vlaardingen, Olivier van Noortlaan 120, NL-3133 AT Vlaardingen (NL).

(74) Agent: **VAN VELZEN**, Maaike, Mathilde; Unilever NV, Patent Department, Olivier van Noortlaan 120, NL-3133 AT Vlaardingen (NL).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR MIXING COMPONENTS



(57) **Abstract:** In an apparatus for mixing components in a mixing chamber, those parts of the mixing chamber which will come into contact with the components are defined by a foil material which can be renewed between two successive mixing/processing operations. The mixing chamber may be defined between two co-operating mould parts. The mixing/processing chamber also may be defined by the foil material itself. In a method for mixing components in a mixing chamber such a foil material is renewed between two successive mixing operations. Further there is provided a pre-shaped elongate web of foil material for use in an apparatus.

WO 2004/045754 A1